

WRIST RESECTION BY THE LATERAL INCISION.

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CASE I.—Miss R. S., aged 35 years, while in bed vomiting, with hand grasping the side of rail, experienced great pain in her wrist. The accident was followed by the usual symptoms of sprain but they gradually intensified. At the end of two months the wrist remained twice its normal size, slightly œdematous, and very painful. The general strength was reduced. The wrist had been treated as a sprain, rheumatism, and a dislocation, and a possible fracture.

After an examination the one diagnostic point that stood out from the foregoing enumerated conditions was pitting on pressure; with the other symptoms, a diagnosis of periostitis of the carpal bones was clear, and an operation was advised.

The X-ray examination revealed little except a slight clearing in the upper part of the cuneiform.

The internal lateral incision was made. This is done by beginning the incision just palmar to the styloid process of the ulna, and extending it downward to the base of the fifth metacarpal bone. This makes an opening scarcely an inch long. The only structure of importance in the wound is the extensor carpi ulnaris. The opening is sufficiently large to admit the index-finger, a Volkman spoon, bone forceps, or chisel. Through the wound thus made I succeeded in removing all of the carpal bones except the pisiform and with a chisel cut off the styloid process of the radius. Tincture of iodine was used to sponge out the cavity. Packing controlled the hæmorrhage. The wound was closed in two months with a perfect recovery. A dorsal splint made for the purpose was used for several months. The structures across the wrist-joint gradually shortened, as may be seen by examining the X-ray (Fig. 1.) taken several months after the operation.



FIG. 1.



FIG. 2.



FIG. 3.

CASE II.—Miss L. H., aged 21 years, who had been suffering for several years with pain and swelling in the wrist, which greatly increased in size and developed into a typical spindle-shaped tubercular joint. The tubercular process in the bone liquefied, and extended into the soft structures about the joint, especially in the neighborhood of the ulna, the enlargement extending up the forearm about twelve inches. The abscess opened spontaneously and had been discharging for several months. An X-ray picture was taken which, as can be seen (Fig. 2), showed a disorganization of the semilunar and cuneiform bones.

The operation consisted of a free incision into the internal surface of the carpal bones, the incision being made between the tendons of the flexor and extensor carpi ulnaris. Through this opening the disorganized bones were found and removed. As the X-ray picture (Fig. 3) shows, the entire semilunar and cuneiform, a portion of the pisiform, and a portion of the scaphoid, or the first row of carpal bones, were practically destroyed.

The lateral opening is undoubtedly a great improvement over the operation recommended by Mintar, which means practically a cleavage of the anterior surface of the wrist, destroying all of the flexors of the hand. This unilateral incision is undoubtedly to be preferred to Lister's bilateral longitudinal incision, and of course the Langenbeck dorsal radial incision involves to a great extent the extensor tendons of the fingers, and in this way impairs the functional usefulness of these structures. The unilateral incision has been practical in these two cases, and furnishes perfectly free entrance into the joint for the removal of all the carpal bones, and the heads of the forearm bones, for that matter, without including in the field of operation one tendon or an artery large enough to require attention.